The Aim of Scientific Analysis of Jomon Pottery

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In this collaborative research, we have aimed to estimate resources of Jomon potteries through scientific analysis. We have taken into consideration the techniques of pottery making while carrying out this research.

Methodology of Analysis
1. Major element analysis using X-ray fluorescence (Geochemical approach)
2. Optical microscopic observation of thin section (Petrological approach)
3. Beryllium isotope analysis using mass spectrometry (Geochemical approach)

Method 1 and 3 are used to characterize clay, while method 2 is principally employed to examine the characteristic of temper.

The primary material used in the analysis was the Jomon pottery excavated from Kawarada site in Nagano prefecture, and all three methods were carried out. Kawarada site is a well-known site of the middle Jomon renowned for the excavation of various types of potteries including the Yakemachi type pottery.